BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

me of Work:-Upgradation of Musical Fountain and other Developmental Works in Kempegowda Park in Ward No 04 of Yelahanka Satellite Town Sub Division Annex 06 SL No 249

			Est Cost Rs.		10000000.00	
	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
	13/4.2.8	Fabricating, supplying and erection of ...Mtrs long hot dip **Galvanized Octagonal pole** with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick, suitable base plate and 4Nos of long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc., (excluding foundation) as per	Nos	1	10930.00	10930.00
2	67/12.9.5	Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible				
		Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Floodlight 180W	Nos	29	17600.00	510400.00
3		Erection of steel supports 7.5 to 8.0 mtr long steel supports (18.75 kgs.,/41Lbs) Rail, 125x75 mm, I beam in pit of 1.5 mtr depth (Releasing of steel supports=90% of erction Charges Rs 298x90%=268.20)	Nos	57	268.20	15287.40

Sl. No.	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
4	79/14.5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires. (Releasing of LED Lights=90% of erction Charges Rs 175x90%=157.50)	Nos	57	157.00	8949.00
5	7/2.6.2	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990.3C X 2.5Sq.mm	Mtrs	250	98.00	24500.00
6	6/2.5.1	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to IS:8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 2C X 1.5Sq.mm	Mtrs	1400	40.00	56000.00
7	6/2.5.2	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to IS:8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 3C X 1.5Sq.mm	Mtrs	150	55.00	8250.00
8	6/2.5.3	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to IS:8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 4C X 1.5Sq.mm	Mtrs	1700	65.00	110500.00
9	40/6.4.4	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm	Mtrs	2000	150.00	300000.00
10	40/6.4.7	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 3.5 core 50 sqmm	Mtrs	100	300.00	30000.00
11	41/6.5.1	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.6 sqmm to 16 sqmm	Mtrs	2000	11.88	23760.00
12	41/6.5.2	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.25 sqmm to 75 sqmm	Mtrs	100	15.50	1550.00
13	41/6.6.1	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)In soil (ordinary)	Mtrs	1800	76.00	136800.00

	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
4	5.14	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics)100Amps 25kA.	Nos	2	4530.00	9060.00
5	30/5.42.2	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete.16SWG	Sqcms	60000	0.35	21000.00
6	5.41.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.40x40x6mm	Mtrs	21	255.00	5355.00
7	A R	Providing RCC pole pedestal of size 0.3x0.3x1.25 as per data rate enclosed	Unit	75	3000.00	225000.00
8	96/13.70.1	13.66 KSRB13-8.1 : Providing and fixing to wall, ceiling and floor, medium density polyethylene pipes 6.00 kgs/sq.cm working pressure 50mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.15.1 /13.9 for internal water supply connection KSRB 13-8.5 - do - 50 mm dia	Mtrs	50	261.00	13050.00
9	96/13.70.5	13.66 KSRB13-8.1 : Providing and fixing to wall, ceiling and floor, medium m 90.00 density polyethylene pipes 6.00 kgs/sq.cm working pressure 110mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.15.1 /13.9 for internal water supply connection KSRB 13-8.9 : do- 110mm	Mtrs	100	450.00	45000.00
20	73	Tipper -5cum	Hr	18	203.00	3654.00
		Total Rs				**1559045.40**
21	A R	Supply and erection of 3 Mtr long Aluminium Pole with 60 watt LED Light made out of extruded alluminium 80x120mm with 3 MM thickness, with attached bent Square curvature at the top with Two nos of Light, Blue colour Strip Light should be conduted along the Pole and Square light on liner side, Grey Colour Powder Coated, strip wattage 20W, pole is mounted on base Plate of 200x200 with required 4 nos foundation Bolts suitable for cable entry hole of 60mm at the bottom of the Pole. MCB Cutting of 500mm from the bottom of the pole with 12 inches Height.as per the Drawing enclosed . Model name & Make :Square super , Emerald Lighting Solutions or any equalent	Nos	50	33712.00	1685600.00

Sl. No.	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
22	AR	Supply and erection of 3 Mtr long Aluminium Pole with 60 watt LED Light made out of extruded alluminium 80x120mm with 3 MM thickness, with same dimention attached bent at 45 deg Bracket and Diamond Shaped Curvature suspended from the Bracket, Blue colour Strip Light should be conduted along the Pole, bracket and Diomend Shape on linear side, Grey Colour Powder Coated, strip wattage 20W, pole is mounted on base Plate of 200x200 with required 4 nos foundation Bolts suitable for cable entry hole of 60mm at the bottom of the Pole. MCB Cutting of 500mm from the bottom of the pole with 12 inches Height.as per the Drawing enclosed. Model name & Make :Diamond Cargo , Emerald Lighting Solutions or any equalent	Nos	25	43344.00	1083600.00
23	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of CENTRE JET ,it should be 20mm orifice with a jet height of 7 Mtrs high & stable jet made of brass	Nos	1	20250.00	20250.00
24	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of SWIVEL LINE a dynamic pattern, each with 18 numbers brass nozzles To & Fro movement on either side with the help of electro-mechanical actuator.	Nos	2	67837.50	135675.00
25	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of BASKET PATTERN- Consists of 1.1 Mtr Dia Alluminium ring having 18 Nos10 MM Polymer nozzles, With Jet Height of 4 Mtrs	Set	1	44892.00	44892.00
26	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of TWO TIER WEDDING CAKE-Consists of two nos alluminium rings of dia 1.1 Mtrs and 1.5 Mtrs, with total 72 Nos brass nozzle to form two tier effect	set	1	104031.00	104031.00
27	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of MESH RING with 600 mm dia, Each with 20 nos 3 mm ball joint brass,which can be fine tuned to give the formation of 'Mesh Ring'. With a jet height of 2 Mtrs	Nos	4	29812.50	119250.00
28	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of AUXILIARY STRAIGHT JET- Consists of 10mm orificenoryl construction With a jet height of 5 Mtrs	Nos	4	4387.50	17550.00
29	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of DANCING PEACOCK— This is a revolving pattern consisting of 20mm brass jet having 13 outlets. This brass jet revolves to create a 'Dancing Peacock' effect.	Nos	4	18000.00	72000.00
30	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of SMALL DOME –Each Small dome 750mm dia Alluminium ring Consists of 20no brass ball joint nozzle With a jet height of 2 Mtrs	Nos	2	32438.25	64876.50
31	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of OUT SIDE DROP RING –Consisting of 900mm dia Alluminium ring with 24 no brass ball joint nozzle With a jet height of 1.5 Mtrs	Nos	2	37755.00	75510.00
32	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of DANCING FOUNTAIN- with jet height of 2 Mtrs	Nos	2	22500.00	45000.00

Sl. No.	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
33	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of MIST COLUMN-Each Mist column consists 19 no of mist nozzles mounted on an aluminium header.	Sets	4	27787.50	111150.00
34	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of ARCH JET-Consists 12.7 mm brass nozzle With a jet height of 4 Mtrs	Nos	4	13500.00	54000.00
35	AR	Fabrication, Supplying, erection, Integration, testing and commissioning of Aluminium supporting frame for water effects with 100 x 50 mm alu channe	Mtrs	30	4837.50	145125.00
36	AR	Supplying, erection, Integration, testing and commissioning of Solenoid valves Made out of SS construction	Nos	21	20250.00	425250.00
37	AR	Supplying, erection, Integration, testing and commissioning of Gate valves:GM gate valve (40 mm, 32 mm & 25 mm) (Make: HM/Vijay)	Nos	56	6075.00	340200.00
38	AR	Supplying, erection, Integration, testing and commissioning of CI check valve, 100 mm, wafer type. (Make: Leader / Zoloto / L&T)	Nos	2	16875.00	33750.00
39	AR	Supplying, erection, Integration, testing and commissioning of Mono submersib;e pump with Suction strainer with SS mesh 10 HP, 3 Phase, Make: Kirloskar / KSB	Nos	2	146700.00	293400.00
40	AR	Fabrication,Supplying, erection, Integration, testing and commissioning of GI Sump cover of size 70" x 32" with SS mesh	No	1	12600.00	12600.00
41	AR	Fabrication,Supplying, erection, Integration, testing and commissioning of Fabrication,Supplying, erection, Integration, testing and commissioning of GI manifold, 100 NB x 2 m long, with supporting stands	Nos	2	5962.50	11925.00
42	AR	Fabrication,Supplying, erection, Integration, testing and commissioning of GI feeder pipe (Jindal / Utkarsh), 6 m long, connecting the pumps & manifold	Nos	2	17145.00	34290.00
43	AR	Fabrication,Supplying, erection, Integration, testing and commissioning of GI feeder pipe (Jindal / Utkarsh) connecting the manifold and water effects	Set	1	169087.50	169087.50
44	AR	Fabrication,Supplying, erection, Integration, testing and commissioning of Electromechanical Actuator with splash proof FRP cover and necessary linkages.	No	1	338069.25	338069.25
45	AR	Supplying, erection, Integration, testing and commissioning of LED lights (RGB), IP 68, 21 Watts 12 volts in polymer construction	No	62	10125.00	627750.00
46	AR	Supplying, erection, Integration, testing and commissioning of Underwater junction box	No	30	1845.00	55350.00
47	AR	Fabrication,Supplying, erection, Integration, testing and commissioning of Electrical panel for pumps	No	1	371250.00	371250.00
48	AR	Fabrication,Supplying, erection, Integration, testing and commissioning of Master Control panel for valves & lights	No	1	529312.50	529312.50
49	AR	Fabrication,Supplying, erection, Integration, testing and commissioning of Programmed Controller and FFC controller	No	1	253170.00	253170.00
50	AR	Supplying, erection, Integration, testing and commissioning of Speaker 200 watt (Ahuja)	Nos	8	36000.00	288000.00
51	AR	Supplying, erection, Integration, testing and commissioning of Amplifier 500 watt (Ahuja)	Nos	2	86062.50	172125.00
52	AR	Supplying, erection, Integration, testing and commissioning of DVD Player	No	1	13837.50	13837.50

Sl. No.	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
53	AR	pre selected songs of our choice programming with fountain effects 60 Minits	Set	1	202500.00	202500.00
54	AR	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for	Nos	2	51500.00	103000.00
					Total Rs	**9612421.65**
		GST Charges (12% on SR Electrical items) Item No 1 to 20				187108.97
		DPR & PMC Charges 1%+1%				200273.38
		Miscellaneous				196.00
		Grand Total Rs				**10000000.00**

ERTIFICATE

The Place was inspected and work is essential.
The Provision made in the estimate is adequate and are necessary.
The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
The rates in the Estimate is based on PWD(Elec) SR of 2019-20.and approved rates

sst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
Sub-Division No.
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YELAHANKA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

echnical sanction
Rs 100 Lakhs
P37HE
CR NO: 24/1 Dt: 28.07.21

Administrative Approval
Accorded For Rs. 100 Lakhs
Head: A/C P37HE
CR NO: 12 Dt: 01/12/2022

E.E. (Elec)